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Authors

Maly, Christina
McClendon, Katherine A
Baumgartner, Joy Noel
et al.

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Christina Maly¹, Katherine A. McClendon²,
Joy Noel Baumgartner³, Neema Nakyanjo⁴,
William George Ddaaki⁴, David Serwadda⁵,
Fred Kakaire Nalugoda⁴, Maria J. Wawer⁶,
Erika Bonnevie⁷, and Jennifer A. Wagman⁷

Abstract

The leading causes of death and disability among Ugandan female adolescents aged 15 to 19 years are pregnancy complications, unsafe abortions, and childbirth. Despite these statistics, our understanding of how girls perceive adolescent pregnancy is limited. This qualitative study explored the social and contextual factors shaping the perceptions of adolescent pregnancy and childbirth among a sample of 12 currently pregnant and 14 never pregnant girls living in the rural Rakai District of Uganda. Interviews were conducted to elicit perceived risk factors for pregnancy, associated community attitudes, and personal opinions on adolescent pregnancy. Findings indicate that notions of adolescent pregnancy are primarily influenced by perceptions of control over getting pregnant and readiness for childbearing. Premarital pregnancy was perceived as negative whereas postmarital pregnancy was regarded as positive. Greater understanding of the individual and contextual factors influencing perceptions can aid in development of salient, culturally appropriate policies and programs to mitigate unintended adolescent pregnancies.

Keywords

adolescents, pregnancy / parenting; Africa, sub-Saharan; grounded theory; interviews; qualitative analysis; reproduction; rural

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Introduction

Adolescent pregnancy and subsequent childbirth to women less than 18 years old continues to be a major global public health concern, affecting more than 16 million girls and young women worldwide (World Health Organization, 2014). Adolescent pregnancy is commonly associated with adverse psychosocial, socioeconomic, and health outcomes (Sedgh, Finer, Bankole, Eilers, & Singh, 2015). Compared with older mothers, women who become pregnant in adolescence tend to have lower levels of educational attainment and socioeconomic status, and children of adolescent mothers are more likely to have low birth-weight and developmental and behavioral difficulties (Case, Hoyt, Canfield, & Wilkinson, 2015; Chen et al., 2007; Ganchimeg et al., 2014; Kawakita et al., 2016; Raneri & Wiemann, 2007; Timur et al., 2016). Estimates indicate that greater than 90% of adolescent pregnancies occur in low- and middle-income countries (Chandra-Mouli, Camacho, & Michaud, 2013; Kirbas, Gulerman, & Daglar, 2016; World Health Organization, 2014).

In East Africa, almost 10% of young women give birth by age 16 (Neal, Chandra-Mouli, & Chou, 2015). In particular, Uganda reports the highest proportion of women giving birth before the age of 20 (63%), and the highest total fertility rate (6.2) in East Africa (Uganda Bureau of Statistics [UBOS], 2014; UBOS & ICF International, 2012). These high teen pregnancy rates have health impacts—the leading causes of

¹Jhpiego, an affiliate of Johns Hopkins University, Baltimore, Maryland, USA

²University of California, Los Angeles School of Nursing, Los Angeles, California, USA

³Duke University, Durham, North Carolina, USA

⁴Rakai Health Sciences Program, Kalisizo, Uganda

⁵Makerere University, College of Health Sciences, Kampala, Uganda

⁶Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland, USA

⁷University of California, San Diego, La Jolla, California, USA

Corresponding Author:

Christina Maly, Jhpiego, an affiliate of Johns Hopkins University, 1615
Thames Street, Baltimore, MD 21231, USA.
Email: Christina.Maly@jhpiego.org



death and disability among Ugandan women 15 to 19 years are complications of pregnancy, unsafe abortions, and childbirth (Uganda Population Secretariat, 2013). A total of 41% of births among 15- to 19-year-old women are reported to be either mistimed or completely unwanted (UBOS & ICF International, 2012). According to qualitative research in Uganda, pregnant adolescents face serious socioeconomic, domestic, and relational hardships (Atuyambe, Mirembe, Johansson, Kirumira, & Faxelid, 2005).

Research has identified determinants of adolescent pregnancy and childbirth globally and in sub-Saharan African settings such as Uganda (Brahmbhatt et al., 2014; Sedgh et al., 2015; World Health Organization, 2014). There is a paucity of information, however, about how adolescents themselves perceive adolescent pregnancy and the context in which it occurs, resulting in gaps in our understanding of how adolescent pregnancy is socially constructed by girls and young women in the region. We know little about the way in which cultural values, gender roles, and other prevailing norms contribute to high rates of adolescent pregnancy, as well as how these norms influence adolescents' perceptions of and responses to early childbearing. Such information can inform reproductive health programs to cater to the specific needs of adolescents most at risk, by developing salient and culturally appropriate measures for preventing unintended pregnancies.

This study explored perceptions of adolescent pregnancy among a sample of currently pregnant and never pregnant (but sexually active) teenage girls living in the rural Rakai District of Uganda. We qualitatively explored these girls' understanding of the risks and protective factors for adolescent pregnancy, and assessed individual and community-level opinions about early pregnancy and childbirth.

Method

Study Design, Research Setting and Sampling, and Recruitment

This study was conducted between May and October 2005 by researchers from the Rakai Health Sciences Program (RHSP) and Family Health International 360 (FHI 360). Full details about the study design have been previously published (Wagman et al., 2009). In brief, this investigation of perceptions about adolescent pregnancy was done as part of a larger qualitative research project to examine the relationships between early sexual debut, sexual violence, and sexual risk taking among pregnant and nonpregnant adolescents in Rakai, Uganda. All field work was conducted by trained qualitative researchers from RHSP, a population-based reproductive health research program. Participants for this qualitative study were drawn from the Rakai Community Cohort Study (RCCS), a population-based HIV surveillance cohort study that was initiated by RHSP in 1994 and operating in 50 communities at the time of the research (Grabowski

et al., 2014; Koenig, Lutalo, et al., 2004; Wawer et al., 1999). Most Rakai communities are rural (~95%) and more than 85% of the population relies on subsistence agriculture (UBOS & ICF International, 2012). RCCS involves the semiannual conduct of a census, followed by behavioral interviews and the collection of biological samples from eligible, consenting community members aged 15 to 49 years, representing more than 85% of age eligible residents (Grabowski et al., 2014; Koenig, Lutalo, et al., 2004; Koenig, Zablotska, et al., 2004; Wawer et al., 1999).

Participants included pregnant and never pregnant adolescent girls, drawn from a purposively selected subsample of female RCCS participants who participated in the 2004-2005 survey ($n = 8,146$) who met the following criteria: being a girl between the ages of 15 and 17 ($n = 497$) and reporting sexual activity in the past 12 months ($n = 236$). Current pregnancy status was ascertained by testing urine samples collected from consenting young women. History of pregnancy was measured by asking "have you ever been pregnant?" Among the sample of 236 eligible female adolescents, 37 were currently pregnant, 135 had never been pregnant, and 64 were formerly pregnant. All RCCS participants who met these criteria were invited to participate. Our final qualitative participants were selected by generating a list of eligible pregnant and never pregnant individuals, after which an RCCS interviewer approached each adolescent girl to seek her permission to be recontacted by another member of RHSP. Those individuals who provided permission to be recontacted were approached and invited to participate in the study until 26 pregnant and 26 never pregnant adolescent girls had been recruited. This sample size was selected based on availability of time and funding and because we felt it would allow us to reach saturation in terms of identifying new themes within our research questions.

Each of the 52 informants was invited to participate in three consecutive, uniquely focused, in-depth interviews (IDIs) spaced over a period of 3 months, between May and October 2015. All emancipated minors and parents or guardians of unemancipated minors provided written consent to participate in this study, and unemancipated minors provided written assent. In Uganda, emancipated minors are considered those under age 18 who are married, have children, and/or are pregnant, and do not require parent/guardian consent to participate in research. For the purposes of this study, approximately half of participants were considered emancipated minors. Interviews lasted 60 to 90 minutes. The first interview aimed to get to know the informant, the second focused on first sexual experiences, and the third focused on sexual risk taking and adolescent pregnancy. Given the sensitive nature of these topics, it was explained to participants that all information they provided would be confidential, that they could skip any questions that they did not feel comfortable answering, and that the research team would not share any information with their parents, spouses, or partners. In addition, researchers informed all participants that all data

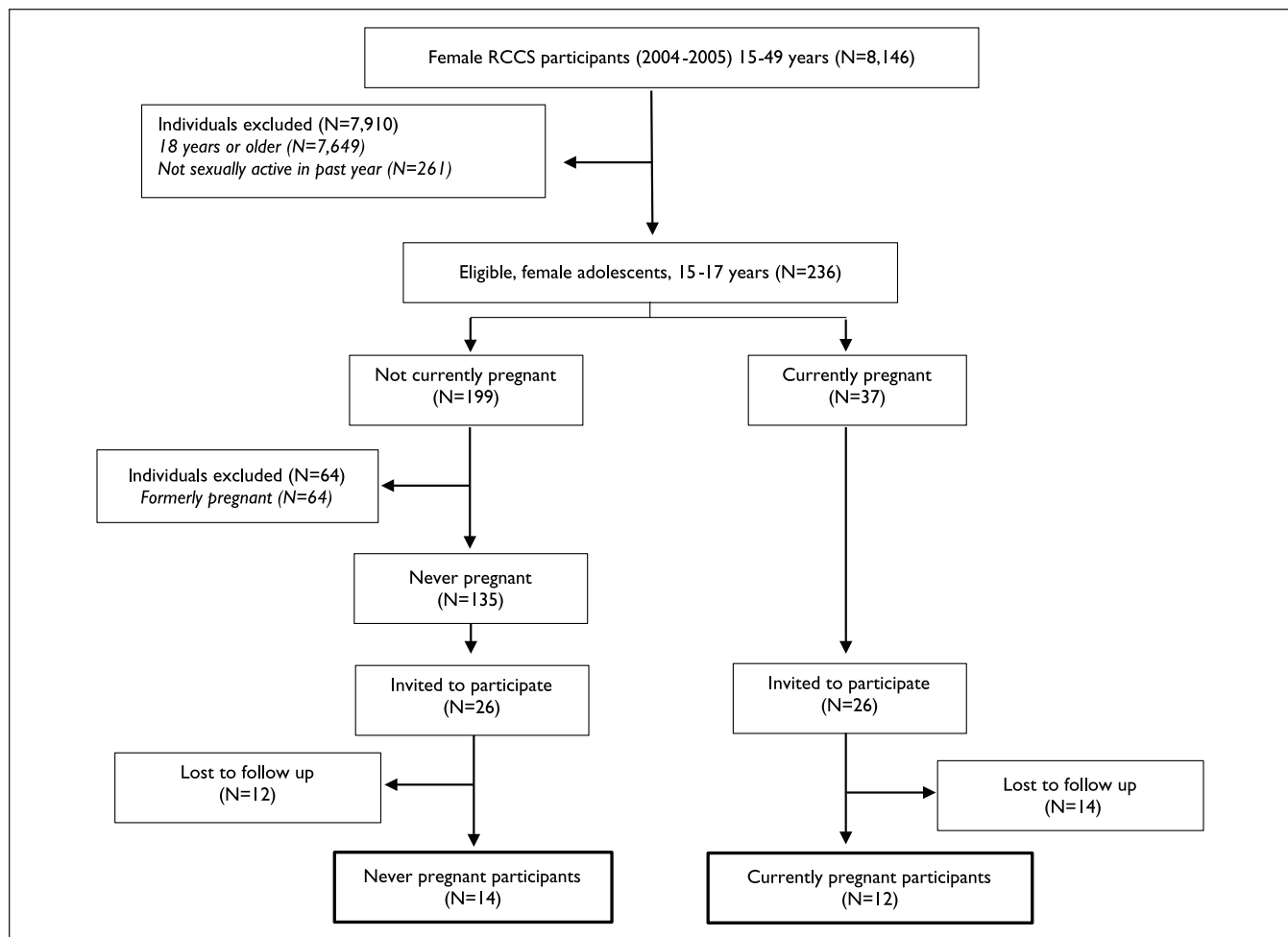


Figure 1. Recruitment process.

would be de-identified before analysis, and names or identifying information would be removed from transcripts and data. By the third interview, only 12 pregnant and 14 never pregnant women could be recontacted and enrolled for participation. Figure 1 illustrates the recruitment process.

Data Collection

IDIs were conducted in the local dialect of Luganda, following semistructured interview guides. They were conducted in a private and secure location (e.g., in a private room in the informant's home, outside in the garden, away from the home near the RHSP vehicle), agreed on by the interviewer and the informant. The aim of each interview was to learn about the informant's perceptions of adolescent pregnancy. Each participant was asked to discuss what factors she felt increased women's risk for early pregnancy and which factors offered protection against it. This study used an iterative data collection approach (Lingard, Albert, & Levinson, 2008), allowing researchers to refine and redefine interview questions central to understanding perceptions of adolescent

pregnancy. Each interviewer endeavored to get as much information as possible about each of the research domains and discuss as many topics as time allowed without exceeding 90 minutes, to prevent informant fatigue. IDIs were tape recorded in the local dialect and later transcribed and translated into English.

Participants were reimbursed for their travel and provided with 3,000 Uganda shillings (approximately US\$1.00 at the time) as time compensation for each interview they completed. This amount was deemed appropriate by the local institutional review board (IRB) and RHSP's Community Advisory Board.

Data Analysis

A grounded theory approach was used to inductively uncover emerging patterns during the data analysis. This methodological strategy was chosen because it enabled the direct development of theories during the data analysis process, allowing for focused, conceptual explanations of the empirical phenomena we were assessing (Strauss & Corbin, 1998).

Table 1.

IDI Informants, <i>n</i> = 26	Measure	Pregnant (<i>n</i> = 12)	Never Pregnant (<i>n</i> = 14)
		<i>n</i> (%)	<i>n</i> (%)
Age (years)	14	1 (8.3)	1 (7.1)
	15	0 (0.0)	1 (7.1)
	16	4 (33.3)	3 (21.4)
	17	7 (58.3)	9 (64.3)
Marital status	Married	6 (50.0)	0 (0.0)
	Single	6 (50.0)	14 (100.0)
Schooling status	In school	0 (0.0)	8 (57.1)
	Out of school	12 (100.0)	6 (42.9)
Highest education	None or primary	11 (91.7)	5 (35.7)
	Secondary	1 (8.3)	9 (64.3)
Daily work ^a	Academic studies or homework	0 (0.0)	9 (64.3)
	Domestic chores	12 (100.0)	11 (78.6)
	Subsistence agriculture	10 (83.3)	6 (42.9)
	Make and sell handicrafts	5 (41.7)	1 (7.1)
	Shopkeeper	0 (0.0)	1 (7.1)

Note. IDI = in-depth interview.

^aAs some participants responded affirmatively to more than one category, totals may not add up to 26 (100.0).

Per this approach, all transcripts were thoroughly read and themes and subthemes were iteratively identified as they emerged in the data (Lofland, Snow, Anderson, & Lofland, 1995). Through multiple readings, codes were developed from emerging concepts that related to the initial research questions. Both open coding and axial coding were conducted during analysis. Open coding was used to create general categories to summarize main themes and basic concepts that emerged in the data, but were not necessarily related to the research questions. Axial coding was used to disaggregate core research themes and compare/contrast categories and concepts to each other. Axial codes were generated and grouped according to similarity, and large overarching themes were identified. A comprehensive coding framework was then created with the open and axial codes to clearly define when and how to use each code. All primary coding was carried out by the first author. A second analyst reviewed codes and result summaries to check for completeness, correctness, and consistency.

Data were then organized and condensed using matrices to explore interconnections and areas of interest. It was during this process that main research findings and themes began to emerge. As a result, we developed a framework to arrange findings, based on themes that emerged. Quotes were selected to support main themes and empirical findings. All analysis was done using the qualitative software program Atlas.ti 5.2 (2006).

Ethics Statement

Ethics approval for this study was granted by the Protection of Human Subjects Committee of FHI 360, the Uganda Virus

Research Institute's Science and Ethics Committee, and the Uganda National Council of Science and Technology. Informed consent was collected from study participants prior to data collection and all data have been de-identified.

Because this study was focused on adolescent pregnancy, we followed the World Health Organization guidelines for conducting safe and ethical research among adolescent women (Ellsberg, Heise, Pena, Agurto, & Winkvist, 2001). All interviewers were trained to provide short-term support to any of the participants who disclosed violence and those requesting assistance were referred to available local services and sources of support. All staff participated in a week-long intensive training facilitated by local violence prevention and counseling experts on how to provide basic psychosocial support to individuals experiencing intimate partner violence (Geary et al., 2008).

Results

Key background characteristics of the study participants at enrollment are presented in Table 1. The median age of participants was 17 years. Two participants were 14 years of age at enrollment but had turned 15 by the time of the interview. Overall, 12 participants were pregnant at the time of the interview and 14 participants had never been pregnant. Among those who were pregnant at the time of the interview, 83% (*n* = 10) reported that they had not planned their pregnancies.

Participants described two key domains that contributed to their perceptions of adolescent pregnancy being either a positive or negative condition. Domain 1—perceived control over getting pregnant—refers to an adolescent girl's

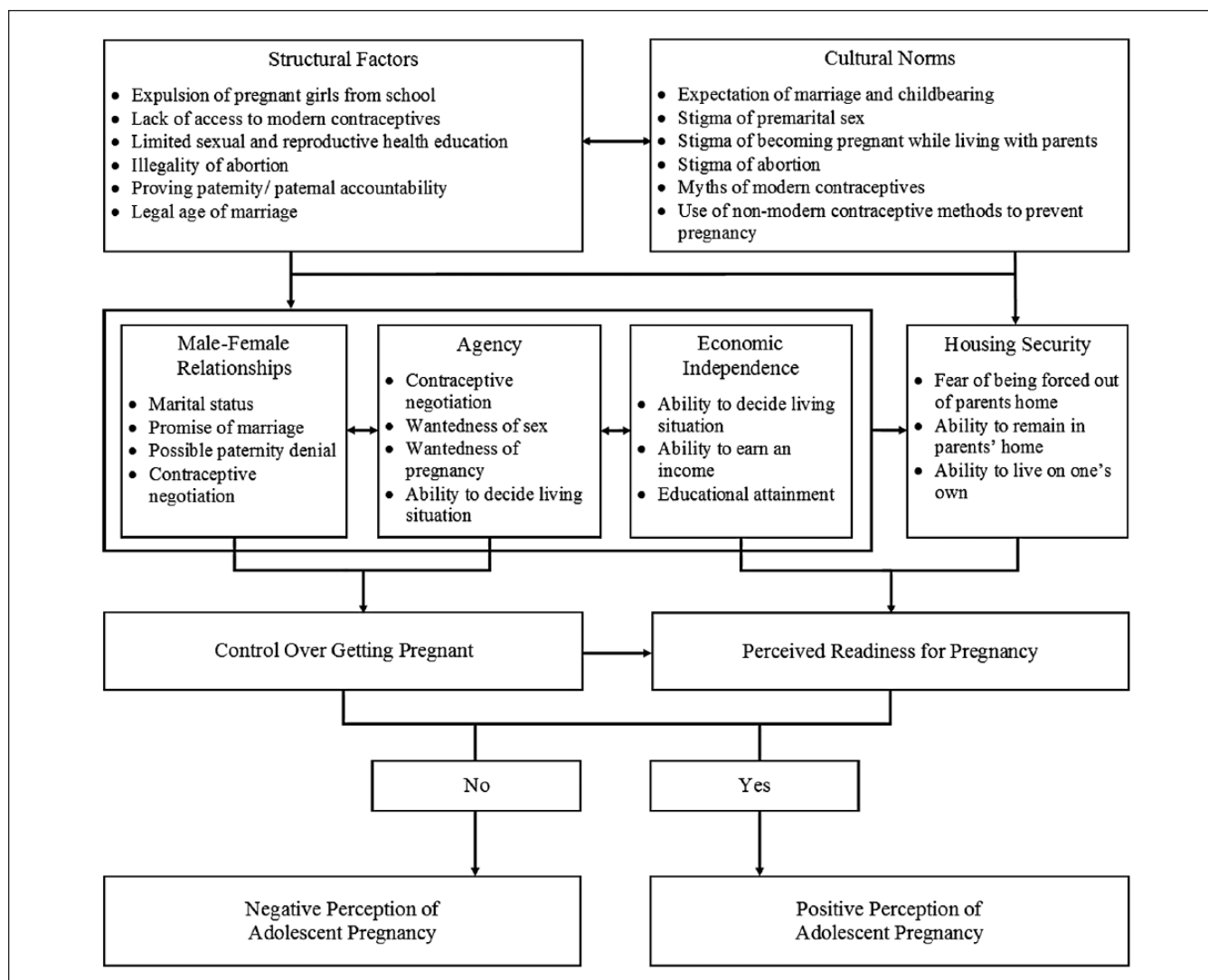


Figure 2. Conceptual framework.

perceived ability to control when she gets pregnant and with whom, based on the status of her relationship and her plans for a family. Domain 2—perceived readiness for pregnancy—refers to how well prepared and interested an adolescent girl is to have a baby based on her economic status and housing stability. Participants indicated that their perceived control over getting pregnant and perceived readiness for pregnancy were affected by factors at two main levels. These included structural factors (such as legal age of marriage, the illegality of abortion, and expulsion of pregnant girls from school) and cultural norms (including myths around modern contraception, stigma of premarital sex, and expectations around childbearing). Various intermediate factors appeared to mediate the ways in which structural factors and cultural norms influenced control over getting pregnant and perceptions of readiness. These factors interplay as illustrated by the conceptual framework developed based on the emergent themes (Figure 2).

Four salient themes emerged and we have organized findings (below) accordingly. These themes are (a) cultural norms and expectations around adolescent pregnancy, (b) consequences of pregnancy outside of marriage, (c) agency among adolescent girls, and (d) knowledge of sexual and reproductive health.

Theme 1: Cultural Norms and Expectations Around Adolescent Pregnancy

The majority of participants discussed clearly defined and widely accepted norms and expectations around marriage and childbirth. Participants described a culturally vetted sequence of events, in which girls were expected to marry around the age of 18, and become pregnant shortly thereafter. In general, girls and young women lived in their parents' home until married, and typically discontinued their education at the time of marriage. Although these adolescent girls

themselves did not necessarily agree that 18 was the correct age for marriage and pregnancy, they agreed 18 was culturally perceived to be the “right age.” “That [is] what I hear them saying that an 18 years old girl is fit to get married, so at 18 years you are of the right age to get pregnant” (currently pregnant, married, age 17). “Any person who gets to 18 years without a child and does not think about giving birth isn’t alive [is barren]” (never pregnant, unmarried, age 17).

In contrast, when asked about their ideal age to have a baby, most of the never pregnant informants indicated wanting to wait until they were older. “I want to get pregnant around 22 years of age . . . Because by then I will be done with my studies and I can get my baby and they cannot send me away from home” (never pregnant, unmarried, age 17).

Nearly all participants who were pregnant at the time of the study had unintended pregnancies and imagined situations in which it would have been better to experience their first pregnancy. In general, participants discussed the “right age” to get pregnant being after completing studies, maybe having a job, being married, and being 18 (the legal age for marriage in Uganda). Most believed pregnancy should take place within the context of marriage, even if the pregnancy occurred during adolescence. Deviation from this norm was typically met with a negative view of the adolescent girl or young woman and her pregnancy. Only two participants reported planned pregnancies and both were married. These participants described their decisions to marry prior to becoming pregnant to avoid any repercussions, as described by one 16-year-old participant:

I made sure that I didn’t get pregnant or befriend men while still at home since most of the girls I had grown up with had already got spoilt by getting pregnant and I also decided to get married before getting spoilt (kicked out) from home. (Currently pregnant, married, age 16)

Theme 2: Consequences of Pregnancy Outside of Marriage

As described by participants, adolescent girls or young women who became pregnant while unmarried faced severe repercussions, including stigma and social isolation, within the community, at school, at home, and from male partners. For most, these consequences fostered negative sentiments toward pregnancy among unmarried girls or women, regardless of age. Many participants said they actively prevented pregnancy to avoid experiencing these outcomes. “If you are a girl in school or not in school and got pregnant, the people who have hope in/respect for you will stop and see you as *ekisasiro* [rubbish/useless] and you will feel ashamed” (never pregnant, unmarried, age 17).

Some never pregnant participants discussed the stigma that girls or women who had become pregnant and sought abortions faced within the community (abortion is illegal in Uganda, unless determined by a physician as necessary for

health reasons). Currently pregnant participants, however, did not discuss abortion during interviews. One 17-year-old participant described the stigma experienced by those who had opted for an abortion:

You remain with your dignity for if you have an abortion and people get to know about it, they will stigmatize you whenever you bypass them and they gossip about you and even when you bypass a group of people they will gossip and talk about you and even if they say something good about you, others will deny it saying that, “that one who carries out abortions.” So you lose your value like that [lose dignity or respect]. (Never pregnant, unmarried, age 17)

Participants frequently brought up the repercussions of pregnancy on school attendance and educational attainment. In some cases, surreptitious pregnancies were discovered while at school via routine medical checks, particularly among girls attending private or boarding schools. Once the school became aware of a pregnancy, these girls were generally expelled. For most participants, expulsion because of a pregnancy was the end of their educational career.

They might be in school, so when they get pregnant they drop out of school, they are expelled from school. Or maybe they tell them to go and come back to study when they finish giving birth. But they may also feel ashamed to go back to study. (Never pregnant, unmarried, age 17)

Many participants reported that pregnancy outside of marriage resulted in negative consequences at home. Adolescent girls or young women who became pregnant while living at home were considered “spoilt” and unsuitable for marriage, and were often regarded as having “wasted” their parents’ money on an incomplete education. As a result, pregnant girls and young women were frequently met with verbal, and on occasion, physical abuse from their families. In some cases, parents “chased” pregnant daughters out of their homes (i.e., forcing them to leave the house), believing these girls or young women should live with the male partner responsible for the pregnancy. “They get pregnant when they are still in school which makes them drop out of school, [then] they sit at home and their parents abuse them all the time because of the behavior they got involved in” (never pregnant, unmarried, age 17).

Theme 3: Agency Among Adolescent Girls

Pregnant and never pregnant participants generally agreed that adolescent girls had little to no control over getting pregnant. Although some girls were able to decide whether or not to engage in sex, their decisions were largely influenced by external pressures including economic vulnerability and pressure from boys and men.

It (sex) also happens when you admire a person, seeing he has money. He might also deceive you and you end up having sex

after seeing he is handsome - even if he is poorly dressed you just see a good looking man. In the end you have sex with him and he gives you money. (Currently pregnant, married, age 16)

Many never pregnant adolescent girls rationalized sex and pregnancy as a way to ensure future security, by finding a male partner to provide financial support. Although these participants had not done this themselves, many expressed this belief to explain why their pregnant peers might have gotten pregnant. "One may say that they are tired of studying and decide that let my boyfriend make me pregnant, and take me for good" (never pregnant, unmarried, age 16).

In contrast, most pregnant participants felt that getting pregnant was something they had little to no control or agency over. Some discussed sexual coercion by authority figures or rape by strangers as a major concern and/or experience.

Sometimes the teacher may want you to have sex with him and you may refuse, he can start hating you, as a result you decide to have sex with him instead of hating you and blaming you for something you never did and make you pregnant if he wanted it but when you never wanted it (pregnancy). (Never pregnant, unmarried, age 17)

Most adolescent girls reported that condom use was at the sole discretion of the male partner. These concerns highlight participants' feelings of compromised agency and lack of control over getting pregnant: "I never used a condom and I got it (pregnant). The boy refuses (to use a condom)" (currently pregnant, unmarried, age 17).

Furthermore, fear that male partners would deny paternity was reported almost universally by both pregnant and never pregnant adolescent girls interviewed. For many, denied paternity had a number of consequences including social stigma and housing and financial insecurity. Participants overwhelmingly described situations in which the financial well-being of a woman and her children rested in the hands of their male partners. Moreover, financial security was only guaranteed if pregnancy occurred within marriage. Participants were keenly aware of these facts, as described by one young woman: "The person who got you pregnant can deny responsibility and at times you may want something and yet you cannot get it, that's why (I) am saying that pregnancy makes you suffer" (currently pregnant, married, age 16).

It affects me for example there is a situation when you get pregnant when you are still at home. Maybe you have been having sex with two people, so this one denies it and the other person also denies it. They all deny responsibility of the pregnancy and after giving birth, the child may resemble one of them but still he cannot accept the responsibility. He might give you support but not enough because he denied responsibility of the child, so the child becomes a burden to you because of getting pregnant when you are still at your parents' home. But if

you were married, you are sure of the father of the child. (Never pregnant, unmarried, age 17)

Theme 4: Knowledge of Sexual and Reproductive Health

During interviews, participants described varying levels of knowledge of sexual and reproductive health. Those who had never been pregnant generally reported knowledge and use of contraceptive methods, including birth control pills, contraceptive injections, and condoms. In contrast, those who were currently pregnant often reported limited, if any, knowledge or use of contraceptive methods. "I did not know about those things . . . That you can prevent pregnancy" (currently pregnant, unmarried, age 14)

Many adolescent girls also discussed their knowledge of sexually transmitted infections, particularly HIV. In fact, most of these participants were more concerned about protecting themselves from HIV than preventing pregnancy: "But if I get pregnant, I can be with it and give birth and live, and also (if) I get sexually transmitted diseases I can get medicine and get cured, but you don't get cured if you have HIV/AIDS" (never pregnant, unmarried, age 17).

The majority of participants also reported some form of misinformation on sexual and reproductive health, including false information in regard to contraception, pregnancy, and childbirth. Some participants reported fear of family planning and contraceptive methods because of erroneous beliefs. When asked where they had learned this misinformation, most reported they had been told by their parents or teachers. One 17-year-old participant who had never been pregnant explained,

They say you can get cancer or it (contraception) can damage your uterus and you fail to get pregnant (cause infertility). They (girls) get that information from their parents because your parent can be scaring you from having sex by telling that you will get pregnant. That even if you have sex while using those preventive methods, they will make you sick for example damaging your uterus. (Never pregnant, unmarried, age 17)

I did not know that if I had sex I would get pregnant because I saw that I was still young I never thought that I would get at 14 years I thought that it would be at 15 years so I never planned to have sex with a man and get pregnant. (Currently pregnant, married, age 16)

Contrasting Views of Pregnant and Never Pregnant Participants

Those who had never been pregnant typically assumed that adolescent girls who became pregnant did so deliberately to ensure future marital, financial, and housing security. Our never pregnant participants commonly attributed adolescent pregnancy to their pregnant peers' bad behavior,

indicating a level of blame. Our pregnant participants, however, indicated they felt as though they had no control over the decision to become pregnant. Furthermore, pregnant women were more aware of the various consequences of becoming pregnant as an adolescent, particularly when unmarried, relative to their never pregnant peers. “They wear short/mini outfits and attract boys who rape them when they [girls] don’t want and they end up getting pregnant when they did not intend to” (never pregnant, unmarried, age 17). “There are times when I do not want but since I am married, I do not have anything to do. Because I am at the man’s home, I do not have anything to do” (currently pregnant, married, age 17).

Discussion

This study suggests that structural factors and cultural norms are important in shaping Ugandan girls’ perceptions of adolescent pregnancy. Participants explained that their feelings about whether or not an adolescent pregnancy situation was positive or negative depended greatly on whether or not the girl had sexual and reproductive agency, or the ability to control when she got pregnant and with whom. Economic independence and housing security were also seen as essential determinants of being “ready” to get pregnant. Without financial security and a stable place to live, pregnancy during adolescence was seen as extremely risky, irrespective of marital status.

Widespread norms in Rakai suggested that adolescent girls were expected to marry and become pregnant around the age of 18. Although pregnancy outside marriage was viewed negatively overall, both pregnant and never pregnant participants considered pregnancy within the context of marriage, even before age 18, to be both socially acceptable and common. In fact, as previously reported from this project, many of our participants viewed sex and pregnancy as implicit to marriage (Wagman et al., 2009). In spite of these findings, studies from other settings have found differences or misinterpretations often exist between the way in which female adolescents perceive their male partners’ pregnancy intentions and his true desires for becoming a father (Clear, Williams, & Crosby, 2011; Lewin, Mitchell, Hodgkinson, Gilmore, & Beers, 2014). It is, therefore, important that future research in rural Uganda, and other settings where prevention interventions are being designed, examine both female and male intentions to become pregnant.

In our study, adolescent girls often expressed anxiety about premarital pregnancy, given that they believed it would negatively affect their participation in the community and, most markedly, at school. As found in many settings across the globe, our participants narrated how becoming pregnant during adolescence threatens a girl’s ability to stay in school (Almeida & Aquino, 2011; Childs, Knight, & White, 2015; Grant & Hallman, 2008) increasing risk for future economic and social disadvantage (Hofferth, Reid, & Mott, 2001;

Mollborn & Jacobs, 2011). Related research indicates that keeping girls in school significantly reduces the likelihood that they will become pregnant during adolescence (Grant & Hallman, 2008; Rosenberg et al., 2015). Thus, programs designed to keep young women in school and provide prenatal health services to those already pregnant are critical. The most effective approaches will account for the context in which adolescent pregnancy occurs (or is successfully prevented). The findings from our study offer insight into how policies and programs could be tailored in Uganda to successfully prevent unintended pregnancies and support girls who do become pregnant. Although these data were collected in 2005, the themes and results presented are still pertinent to current Ugandan society. According to Uganda’s 2016 Demographic and Health Survey, 25% of girls age 15 to 19 either have a child or are pregnant (UBOS & ICF International, 2017). This number represents a 1% increase in pregnancy rates over the previous 2011 survey (UBOS & ICF International, 2012), and shows that adolescent pregnancy remains a major issue throughout the country. Recent research has also highlighted the gap in empirical knowledge about ways to guide interventions that empower girls to prevent unintended pregnancy (Phillips & Mbizvo, 2016). Data gathered in this study can help to create effective interventions that take into account the perceptions of Ugandan girls regarding adolescent pregnancy.

As recommended in numerous studies from Africa (Kruge, Mevissen, Prinsen, & Ruiter, 2016), our results imply a strong need for comprehensive sexual and reproductive health education at school and in the community in Uganda. Home-based communication about sexuality between parents and children has also been suggested (Kruge et al., 2016; Onyeka, Miettola, Ilika, & Vaskilampi, 2012), but was not specifically examined in our study. In addition, we strongly feel pregnant and parenting adolescents should be guaranteed the right to continue their education—both in private and public educational institutions. This would allow pregnant girls the opportunity to continue their schooling and achieve diplomas, which would have a measurable impact on their lives. There is a clear relationship between educational attainment and rates of pregnancy in Uganda, with those attaining higher levels of education becoming pregnant almost 3 years later than those without education, experiencing fewer pregnancies, and reporting fewer complications during and after pregnancy (UBOS & ICF International, 2017). Currently, school policies force most Ugandan girls to drop out of school when they become pregnant (UBOS & ICF International, 2012). Many girls in this study cited that they would ideally become pregnant after graduating from high school, showing their awareness of the fact that a pregnancy would compel them to leave school.

Programs should also be implemented to assist adolescents who do experience unintended pregnancies, including approaches to support pregnant and parenting adolescents to finish their studies. Community systems should be built to

support these adolescents to avoid instances of young women being kicked out of their homes. In the cases where this cannot be avoided, temporary transitional homes should be implemented to house pregnant and/or parenting youth while preparing them to reenter society successfully.

Successful efforts to reduce unintended adolescent pregnancies will hinge on a multipronged approach. Even though sexual and reproductive health education has been highlighted as a cornerstone of preventing adolescent pregnancy, increasing contraception usage and improving health outcomes among pregnant adolescents (Sani, Abraham, Denford, & Ball, 2016; World Health Organization, 2011), efforts must also be placed on reducing the gender inequities that increase young women's chances of unwanted pregnancies. Sexual coercion and violence, including forced first sex, have been associated with adolescent pregnancy in multiple global settings (Baumgartner, Geary, Tucker, & Wedderburn, 2009; Geary, Wedderburn, Mccarraher, Cuthbertson, & Pottinger, 2006) including Rakai, Uganda (Koenig, Zablotska, et al., 2004). Although some programs have also started to involve girls in strategies to mitigate unintended adolescent pregnancies in Uganda, more information is needed to understand how these strategies can be utilized in the most effective ways (UNFPA, 2016).

In our study, although some women felt empowered to postpone pregnancy until after marriage, most (in particular those who were pregnant) felt they had little to no agency in their sexual and reproductive decision making. Many felt that choices about pregnancy were under the domain of male authority (Wagman et al., 2009). Reducing unwanted sex could be accomplished in part by increasing awareness of sexual coercion, implementing programs working toward its prevention, and improving laws so perpetrators are held accountable. Having legal recourse to prove fatherhood needs to be coupled with policy that holds men accountable to the responsibilities of fatherhood—namely, providing financial support. Such policies on paternity could also be used to ensure the rights of fathers if their partners are reluctant in custody sharing. In addition, programs targeting boys and men are critical, to change norms surrounding the acceptability of men's control over sex and relationships (Jewkes, Morrell, & Christofides, 2009; U.S. Department of Health and Human Services, 1999; U.S. Department of Health and Human Services, 2016). Community organizations should direct resources into programs aimed at dispelling myths about modern contraceptives and traditional pregnancy-prevention methods. Adolescent-friendly sexual and reproductive health clinics and pharmacies need to be created. This is particularly important in Rakai as most participants in our study exhibited misinformation and limited knowledge of sexual and reproductive health, exacerbating their vulnerability to unintended pregnancy as an adolescent. Programs also need to help women develop the skills needed to refuse unwanted sex and to negotiate condom use and/or other modern contraceptive methods when sex is consensual. In

addition, there needs to be parental and community support for contraceptive use among premarital teens.

Our study has a number of limitations. Data were collected in 2005, and results may not fully reflect current circumstances in the area. Since the data were collected, both maternal and infant mortality have decreased, and a majority of women are now delivering in health facilities with skilled providers (UBOS & ICF International, 2017). This may affect the applicability of the information to the current context in Rakai, Uganda. However, we believe our findings are meaningful and relevant for two primary reasons. First, there remains a paucity of empirical evidence on adolescent pregnancy in Rakai and Uganda. Thus, irrespective of the data's age, this article contributes to a very small body of work on the topic. Furthermore, recent findings from the neighboring Masaka district suggest that understanding women's perceptions and sociocultural beliefs surrounding pregnancy is key to motivating them to seek antenatal and postnatal care, and ultimately improving maternal and child health (Atekyereza & Mubiru, 2014). Our study builds on these results by offering insight into the unique perceptions of adolescents. Second, data from the 2016 Demographic and Health Survey confirm early pregnancy and childbirth are still key concerns in Uganda, with particularly high levels of first births occurring among girls under the age of 16 years in some parts of the country (UBOS & ICF International, 2017). Separate findings from Rakai confirm adolescent pregnancy remains a key risk factor for dropping out of school (Santelli et al., 2015). Empirical information that helps identify modifiable behaviors and attitudes is instrumental for designing effective teen pregnancy programs.

Another limitation is that these interviews were conducted as part of a study that involved a series of three consecutive interviews with the same participants. Data for this analysis derived from the third (and last) interview in the series and many participants were lost to follow-up. This might have threatened the quality of our findings, as well as our ability to ensure that adequate information was gathered to answer our main research questions. In-depth qualitative interviews can be distorted by the presence of interviewers, causing bias or inaccurate reporting of behaviors. It is also possible that the informants only partially disclosed the truth, particularly given the sensitive nature of the topics. We believe these biases were minimized by the skills of the RHSP's trained team of qualitative researchers who have extensive experience with developing researcher-participant rapport, collecting sensitive data, building trust during the data collection process, and ensuring confidentiality. The study reports on data collected from 26 informants who were selected from one rural district in Uganda, potentially limiting the generalizability of the results. Finally, our study only involved adolescent girls, and thus does not provide direct information on how boys and men view their role in relationships or as fathers or their views on adolescent pregnancy, parenting, and family planning. Many participants in our study said

they did not feel empowered to control when they had sex or if contraception would be used. Furthermore, some females shared experiences of sexual coercion. To address these issues, it is critical that the male partners be involved in providing a full understanding of the situation and that men contribute to the solutions.

Despite these limitations, our findings provide compelling insight into the factors affecting teenage girls' perceptions of adolescent pregnancy. We hope this new information will be used to inform the development of salient, culturally appropriate policies and programs to mitigate unintended adolescent pregnancies in Uganda.

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Author Biographies

Christina Maly, MPH, is a senior monitoring and evaluation advisor at Jhpiego, an affiliate of Johns Hopkins University in Baltimore, Maryland, USA.

Katherine A. McClendon, MS, is a student at the University of California, Los Angeles School of Nursing, in Los Angeles, California, USA.

Joy Noel Baumgartner, PhD, MSSW, is an assistant research professor at the Duke Global Health Institute in Durham, North Carolina, USA.

Neema Nakyanjo, MA, PGDE, is director of the Qualitative Research Department at the Rakai Health Sciences Program in Kalisizo, Uganda.

William George Ddaaki, BA, MSc, is a research assistant at the Rakai Health Sciences Program in Kalisizo, Uganda.

David Serwadda, MBChB, MPH, is a professor at the Makerere University School of Public Health in Kampala, Uganda.

Fred Kakaire Nalugoda, BStat, MHS, is a program director at the Rakai Health Sciences Program in Kalisizo, Uganda.

Maria J. Wawer, MD, MHSc, is a professor in the Department of Population Family and Reproductive Health at the Johns Hopkins Bloomberg School of Public Health in Baltimore, Maryland, USA.

Erika Bonnevie, MA, is a research associate at the Center on Gender Equity and Health at the University of California, San Diego in San Diego, California, USA.

Jennifer A. Wagman, PhD, MHS, is an assistant professor at the Center on Gender Equity and Health at the University of California, San Diego in San Diego, California, USA.